



# RUS - Research and User Support for Sentinel core products



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## Objectives

- Foster the handling and processing of data coming from the Copernicus constellations by the Academic, scientific, R&D communities, incl. SMEs
- Mitigate the “digital divide” affecting Copernicus data access and exploitation (download, archive, handle, process)
- Encourage and enhance the initiatives aiming to support Copernicus uptake

RUS: **a free service to end user** funded by the EC and managed by ESA.



## Our Pillars

## ABOUT RUS

### ICT

#### *Customized processing platform*

- ▣ Scalable Virtual Machines tailored to meet users needs
- ▣ Preinstalled open source software enabling fast algorithm development and prototyping
- ▣ Working environment delivered with user requested **data**

### SUPPORT

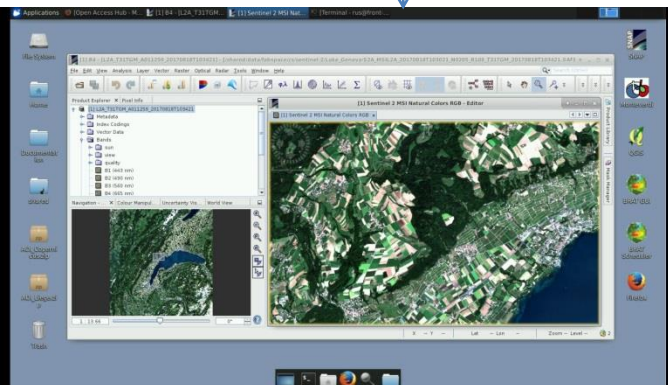
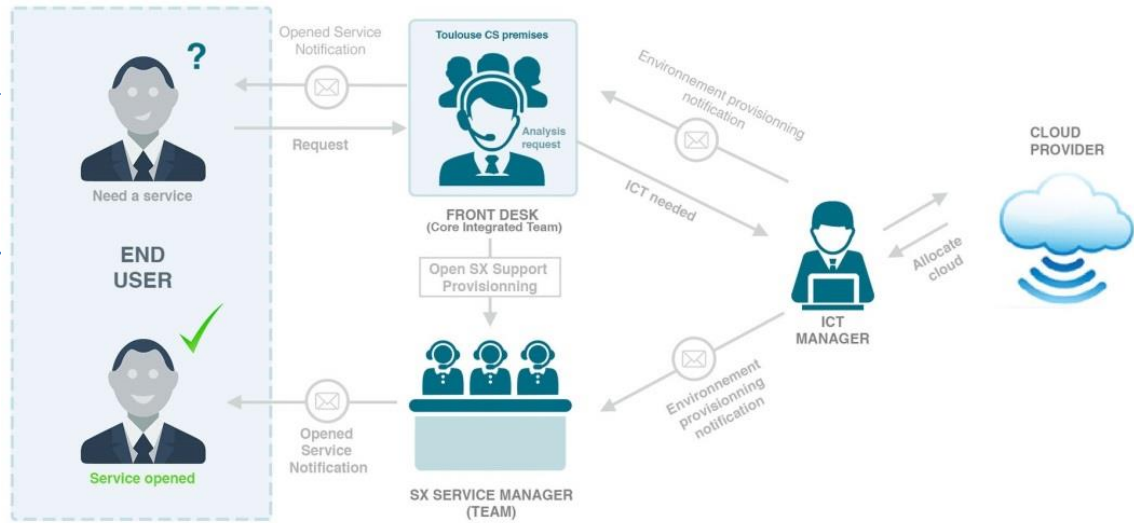
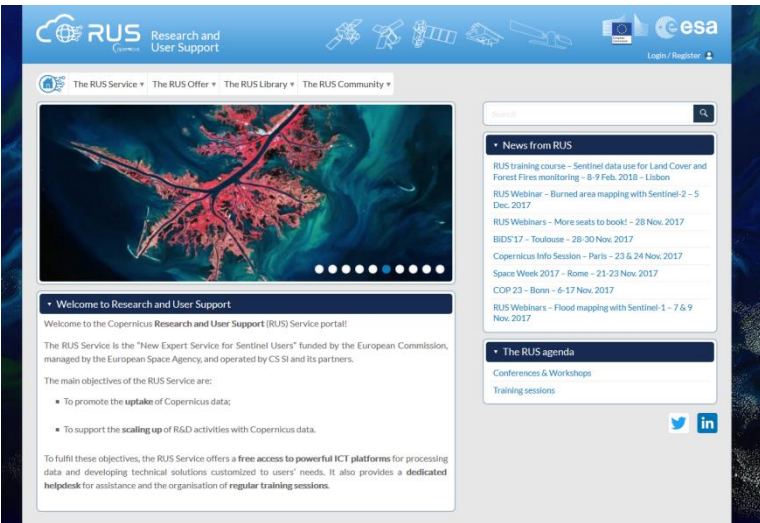
#### *A comprehensive service organisation*

- ▣ A common interface access through a dedicated **Front Desk** supported by a **team of experts**
- ▣ Customized technical solutions provided on request to users
- ▣ **Expert advice** and support for data processing and algorithm integration

### TRAINING

#### *Training & capacity building*

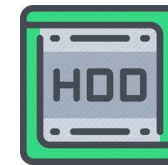
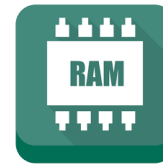
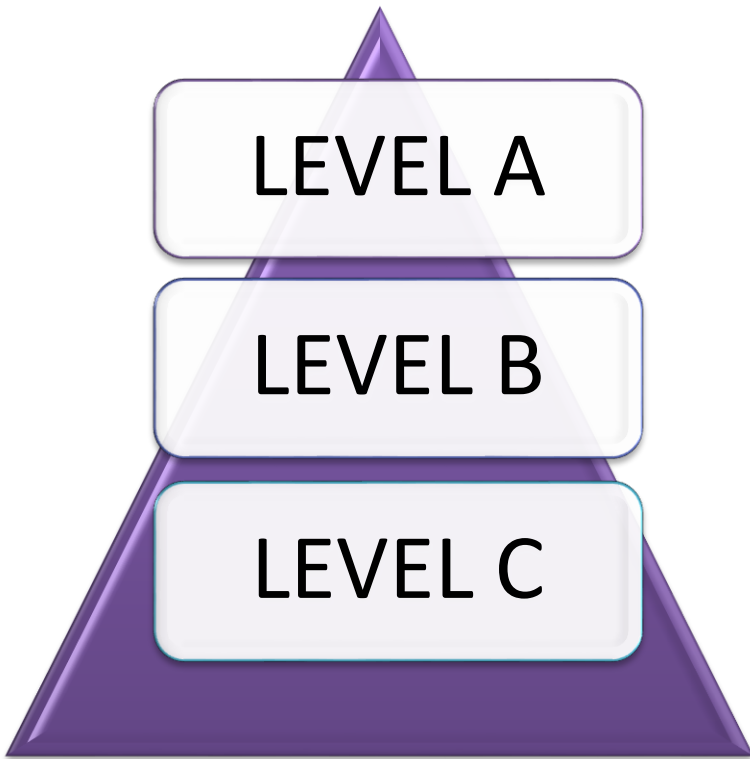
- ▣ Hands-on training sessions to handle and process data
- ▣ **Monthly Webinars** free and open to anyone
- ▣ Tutorials and on-line **documentation**
- ▣ **M-Learning** platform for self learning





# Levels of service

## The IT Offer



4 cores

≤ 16 GB

≤ 1 TB

≤ 3 months

LEVEL A

≤ 16 cores

≤ 64 GB

≤ 10 TB

≤ 6 months

LEVEL B

≤ 48 cores

≤ 450 GB

≤ 50 TB

≤ 12 months

LEVEL C

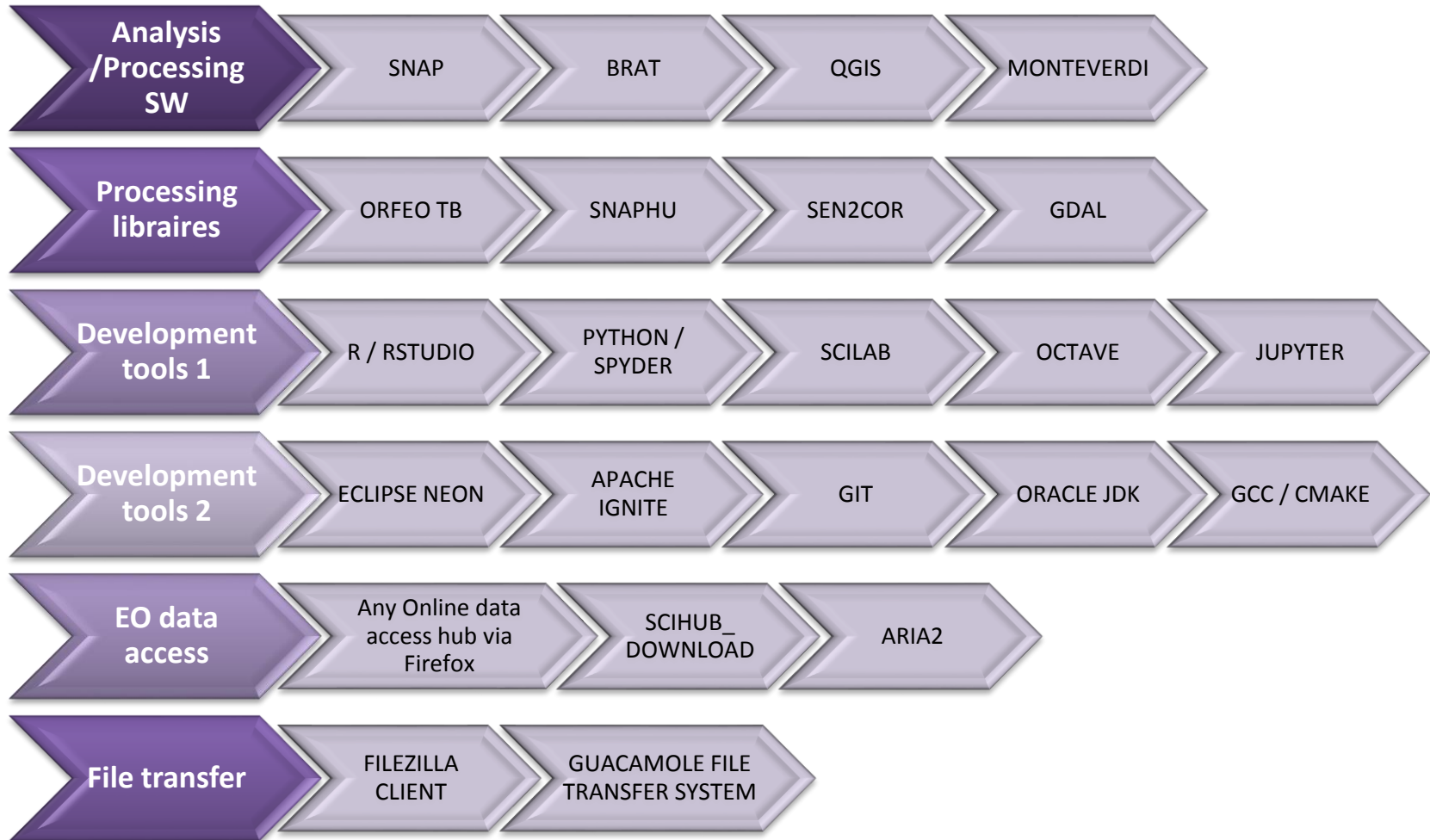
Possibility to make temporary clusters of VMs.

→ Possibility of service extension , subject to service manager's approval.



# Pre-installed software / tools

The IT Offer





# Improving Capacity

## Training

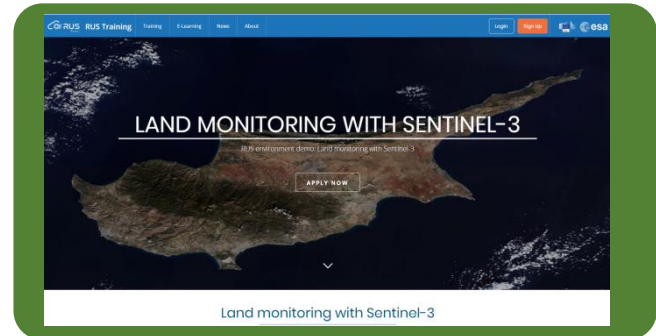
### Face to Face training events

Applications of RS explained and demonstrated by experts tailored to different user categories (from beginners to trainers). Hands on exercises to extract information from EO data.



### Monthly Live Webinars

Aiming to demonstrate how to exploit the RUS environment for processing data and deriving results.



### M-learning Portal

Short videos with the theory behind Remote Sensing and Applications; these include questions and quizzes to test the understanding of the lecture





## *Second year of operations started*

### Upcoming steps

- Continuous upgrades: platform, infrastructure, software and processes
- Availability of Sentinel-5 data and related tools
- RUS integration in Data and Information Access Services (Creodias, Mundi, Onda, Sobloo)

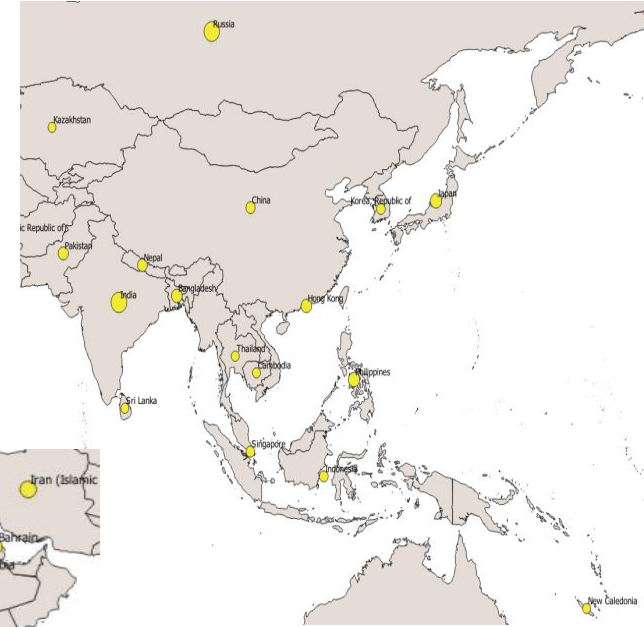
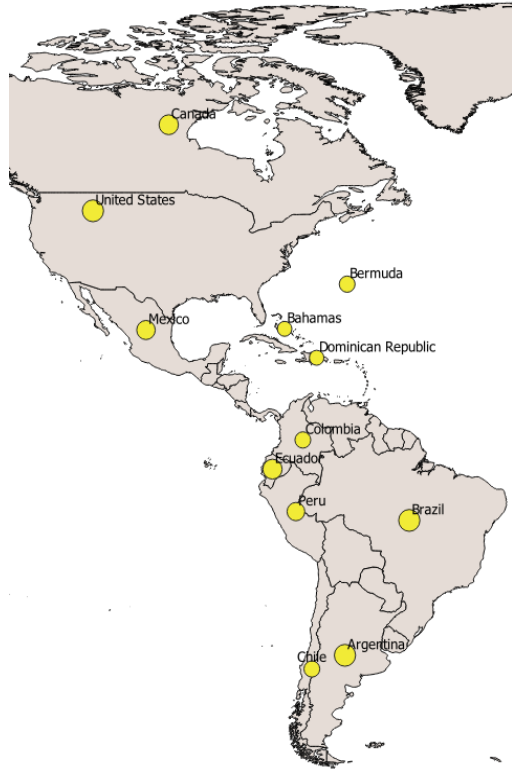




# Use of Copernicus data: perspective from the RUS service



# One year of RUS Service operations



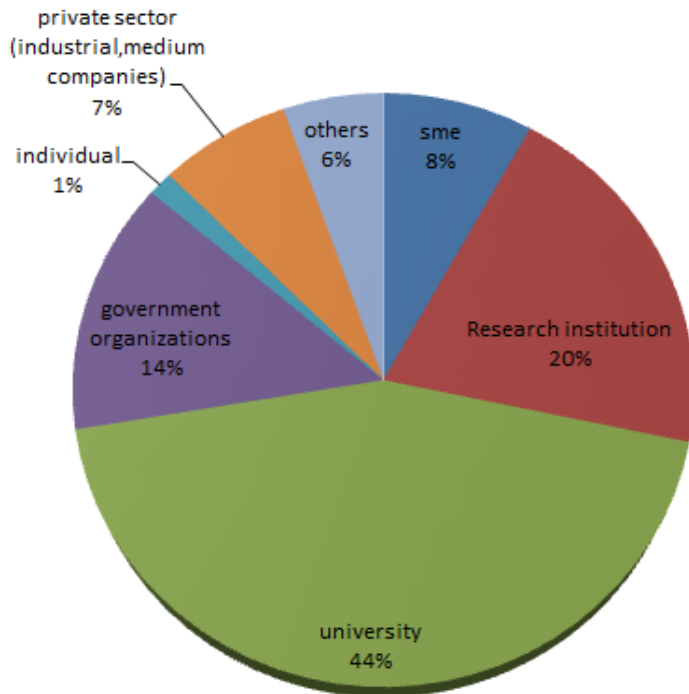
- ❖ 78 countries
- ❖ 73% EU users
- ❖ 27% other



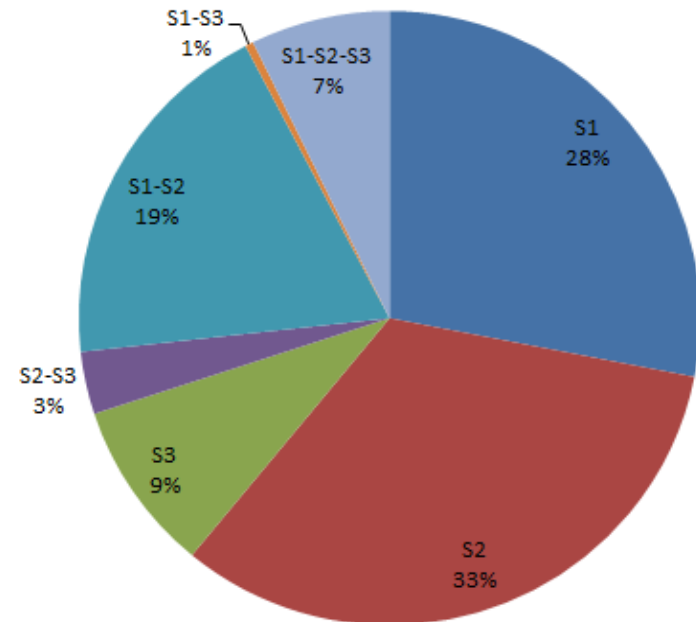
## One year of RUS Service operations

**600 registered users (and an overall satisfaction mark of 9.2)**

**RUS users affiliation**

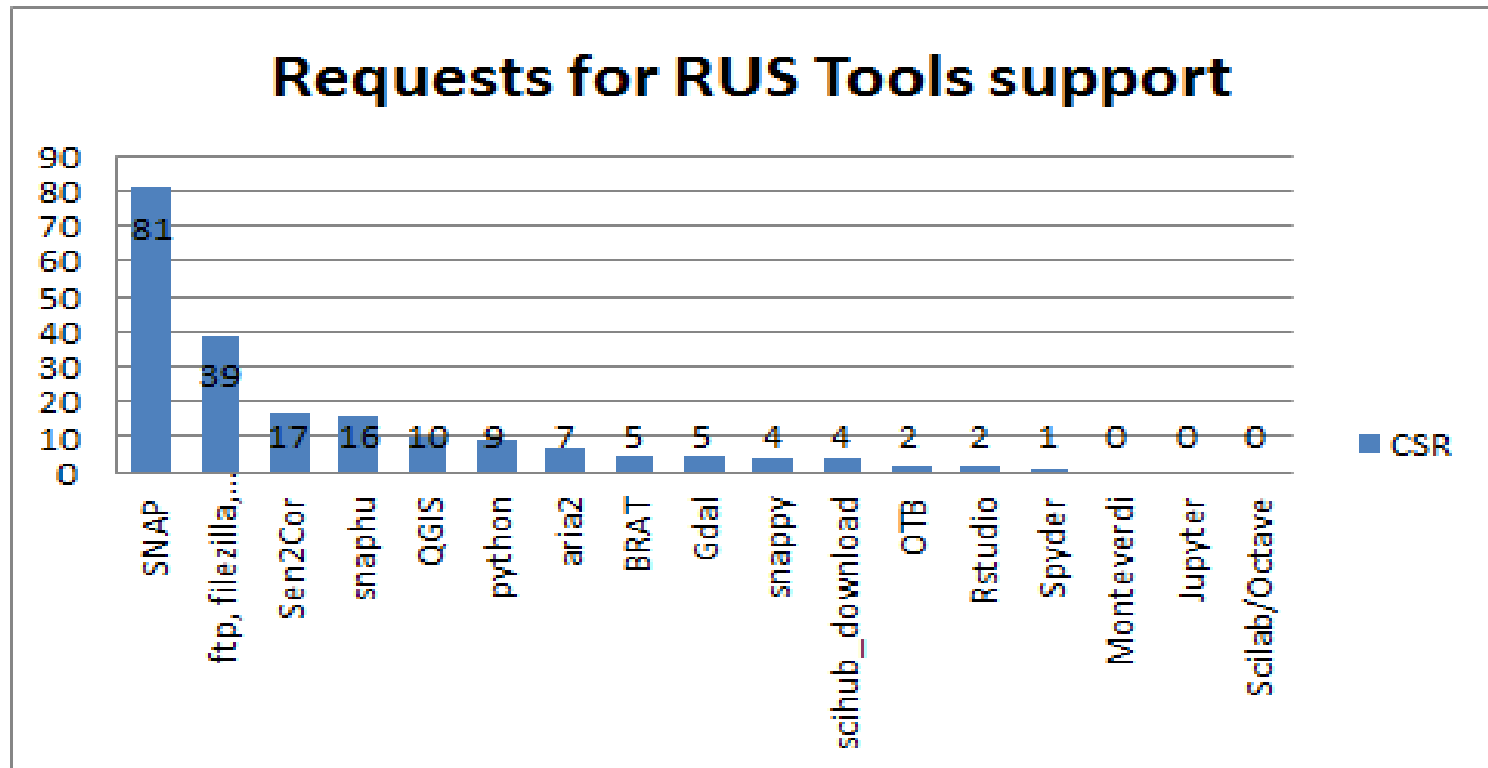


**Copernicus core product used**



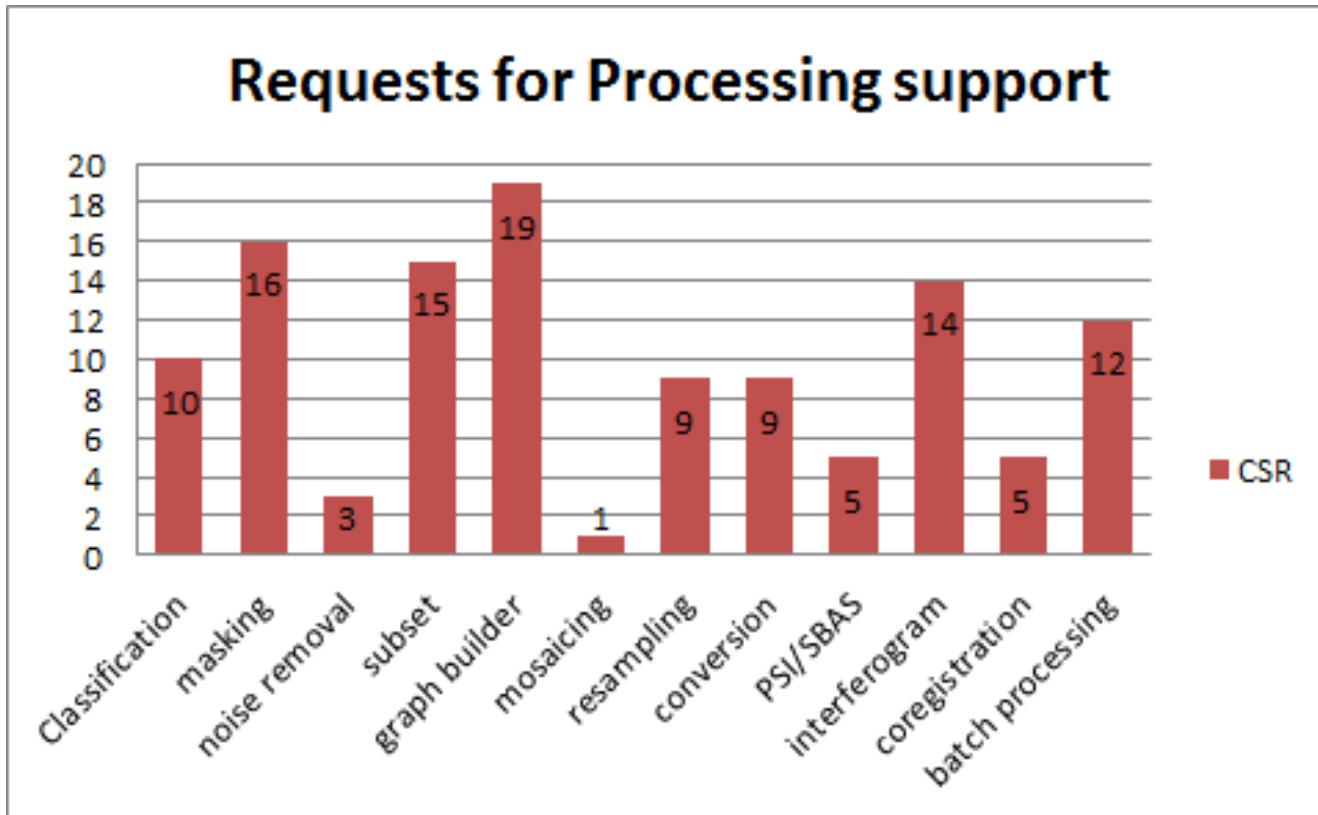


## One year of RUS Service operations





## One year of RUS Service operations





## *One year of RUS Service operations*

User requests

Optical data: higher spatial resolution

Radar data: more training materials and guidance documents

Bricks of processing chains (e.g., Sen2Agri)

Higher data download speed

=> *Advent of the DIAS*

=> *ESA Data benchmark Call*



# Thank you for your attention

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Present at *DEMO* session on Wednesday afternoon



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